TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104 Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

WIN-1819

Effective Date: November 1, 2013 Reevaluation Date: **October 2014**

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code** (IRC) and the **International Building Code** (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilitities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Ultra Sterling Aluminum Clad Wood Double Hung Windows, Individual, Impact Resistant, manufactured by

Kolbe & Kolbe Millwork Co., Inc. 1323 South Eleventh Avenue Wausau, WI 54401 (715) 842 - 5666

General Description:

| System | Description | Label Rating | Design Pressure Rating (psf) | Hallmark Certification |
|--------|--|---------------------|---------------------------------|--|
| 1 | Ultra Sterling Double Hung; Missile Level D, Wind Zone 4 | LC-PG65 46 x 80 - H | +65/-70 | 413-H-1125.00 413-H-1125.01 413-H-1125.02 413-H-1125.03 |

Product Dimensions:

| System | Overall Size | Top Sash Size | Bottom Sash Size |
|--------|-----------------|-----------------|------------------|
| 1 | 45.50" x 80.44" | 42.19" x 38.25" | 42.19" x 40.13" |

Product Identification (Certification Agency Label on Window):

| System | | |
|--------|-------------------------------------|--|
| | Certification Agency | WDMA |
| | Manufacturer's Name or Code Name | Kolbe & Kolbe Millwork Co., Inc. |
| 1 | Product Name | Ultra Sterling Double Hung |
| | Test Standards | AAMA/WDMA/CSA 101/I.S.2/A440-11 |
| | | AAMA/WDMA/CSA 101/I.S.2/A440-08 |
| | | ASTM E 1886 / 1996; Missile Level D; Wind Zone 4 |

Impact Resistance:

| Impact Resistant | Requirement | | | |
|------------------|--|--|--|--|
| Yes | These products satisfy the Texas Department of Insurance's criteria for | | | |
| | protection from windborne debris in the Inland I and Seaward zone . The assemblies may be installed at any height on the structure as long as the design | | | |
| | pressure rating for the assemblies is not exceeded. | | | |

INSTALLATION INSTRUCTIONS

General: The assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

Installation:

Option 1: The assembly shall be fastened to minimum Southern Yellow Pine lumber. The assembly is secured to the wall framing using Kolbe & Kolbe metal installation clips. The installation clips (1 $\frac{5}{8}$ " x 10 $\frac{1}{16}$ " x 0.04") are secured to the frame side jambs, head, and sill. The clips are secured to the frame with two (2) No. 8 x $\frac{3}{4}$ " screws. The clips are secured to the wall framing with one (1) No. 8 x 1 $\frac{3}{4}$ " screw. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ inches into the wall framing. The spacing of the clips is specified in the table below.

Installation Clip Spacing:

| System | Distance From Each | Head | Sill | Side Jambs |
|--------|--------------------|---------------------|---------------------|---------------------|
| | Corner | (on center spacing) | (on center spacing) | (on center spacing) |
| 1 | Head: 15 3/16" | None | None | 11 ½ " |
| | Side Jambs: 11 ½ " | | | |

Option 2: The assembly shall be fastened to minimum Southern Yellow Pine lumber. The assembly is secured to the wall framing using the frame with minimum No. 10 screws. The fasteners shall be long enough to penetrate a minimum of $1 \frac{1}{2}$ inches into the wall framing. The spacing of the fasteners is specified in the table below.

Fastener Spacing:

| System | Distance From Each | Head | Sill | Side Jambs |
|--------|---------------------|---------------------|---------------------|---------------------|
| | Corner | (on center spacing) | (on center spacing) | (on center spacing) |
| 1 | Head: 11 3/8 " | None | None | 815/16" |
| | Side Jambs: 815/16" | | | |

Nailing Flange (Options 1 and 2): The nailing flange is secured to the wall framing with minimum 12 gauge smooth shank roofing nails spaced 7 inches on center along the perimeter of the window.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.